

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1. (Currently Amended) A network system comprising computers, ~~a plurality of~~ storage devices for managing ~~the one or more~~ volumes, said volumes being ~~connected to~~ accessible by said computers through a SAN (storage area network), and a management computer connected to said computers and said storage devices, wherein:

each said storage device has a control unit for controlling ~~the~~ input and output to and from the one or more volumes based on volume access control information for specifying one or more authorized computers from among the computers, ~~that can~~ said authorized computers being permitted to access the one or more volumes; and

said management computer includes an interface for receiving a notice of a fault in the one or more volumes and said volume access control information from said plurality of storage devices, and a control unit for executing a procedure for notifying the fault ~~of in the said one or more~~ volumes to the one or more authorized ~~said computers which are permitted to access said the one or more~~ volumes based on said volume access control information.

2. (Currently Amended) A recording medium recording a management program to be executed by a management computer that is connected to a plurality of computers and to a plurality of storage devices for managing ~~the volumes connected~~ accessible to said plurality of computers through a SAN (storage area network), said recording medium being ~~so designed as can be~~ capable of being read by said management computer, ~~and recording a~~ said management program ~~for executing:~~

a procedure for receiving a notice of a fault in at least one volume of the volumes from one or more storage devices of said plurality of storage devices;

a procedure for receiving volume access control information from said one or more storage devices of said plurality of storage devices for specifying authorized computers from among said plurality of computers that ~~can~~ are permitted to access ~~said the~~ at least one volume volumes; and

a procedure for notifying the fault in the at least one volume to said authorized computers that are permitted to access the at least one volume volumes based on said volume access control information.

3. (Currently Amended) ~~A~~ The recording medium according to claim 2, wherein ~~a~~ the management program ~~is recorded to further~~ executes:

a procedure for receiving passage access control information from ~~the a~~ connection device having a control unit for controlling ~~the~~ input and output of data among a plurality of interfaces connected to said authorized computers and to said

one or more storage devices based on said passage access control information defining the input and output of data among said plurality interfaces; and

a procedure for notifying a the fault in the at least one volume to said authorized computers that are permitted to access the at least one volume ~~volumes~~ based on said passage access control information and said volume access control information, instead of executing said procedure for notifying the fault specified in claim 2.

4. (Currently Amended) A The recording medium according to claim 2, wherein ~~a~~ the management program ~~is recorded to further executes:~~

_____ a procedure for notifying a the fault in the at least one volume to the authorized computers permitted to access the at least one volume ~~volumes~~ based on said volume access control information and managing person control information, said managing person control information ~~for specifying~~ for said volumes or said plurality of computers ~~permitting the management for each of the management IDs~~ for identifying ~~the~~ a managing person or the management computer as being permitted to manage said volumes or said plurality of computers, instead of executing said procedure for notifying the fault specified in claim 2.

5. (Currently Amended) A The recording medium according to claim 2, wherein ~~a~~ the management program ~~is recorded to further executes:~~

_____ a procedure for receiving said volume access control information from said plurality of computers different from other than said management computer, instead of, or in addition to executing the procedure for receiving said volume access control information set forth in claim 2.

6. (Currently Amended) A-The recording medium according to claim 3, wherein-a the management program is recorded to further executes:

_____ a procedure for receiving said passage access control information from said plurality of computers different from other than said management computer instead of, or in addition to executing the procedure for receiving said passage control information set forth in claim 3.

7. (Currently Amended) A-The recording medium according to claim 4, wherein-a the management program is recorded to further executes:

_____ a procedure for obtaining said managing person control information from said plurality of computers different from other than said management computer.

8. (Currently Amended) A management computer connected to computers and to a plurality of storage devices for managing the one or more volumes connected to accessible by said computers through a SAN (storage area network), said management computer comprising:

an interface for receiving a notice of fault in the ~~a~~ first volume of said one or more volumes from a first storage device of said plurality of storage devices and volume access control information for specifying, from among said computers, one or more computers that ~~can~~ are permitted to access said first volume ~~volumes~~; and
a control unit for notifying the fault in the first volume to said one or more computers permitted to access said first volume ~~volumes~~ based on said volume access control information.

9. (Currently Amended) A network system comprising computers, storage devices for managing the one or more volumes ~~connected to~~ accessible by said computers through a SAN (storage area network), a connection device having a plurality of interfaces connected to said computers and to said storage devices, and a management computer connected to said computers, to said storage devices, and to said connection device, wherein:

said storage device has a first control unit for controlling the input and output to and from the one or more volumes based on volume access control information, said volume access control information ~~for specifying, from among said~~ the computers, authorized computers that ~~can~~ are permitted to access the one or more volumes;

said connection device has a second control unit for controlling the input and output of data among said interfaces based on passage access control information defining the input and output of data among said interfaces; and

said management computer includes a first interface for receiving a ~~notice~~ of faults in the one or more volumes and said volume access control information from said storage devices, a second interface for receiving said passage access control information from said connection device, and a control unit for notifying the fault in the first volume to said authorized computers which are permitted to access said one or more volumes based on said volume access control information and said passage access control information.

10. (Currently Amended) A recording medium recording a management program to be executed by computers, by storage devices for managing the volumes ~~connected to~~ accessible by said computers through a SAN (storage area network), by a connection device having a plurality of interfaces connected to said computers and to said storage devices, and by a management computer connected to said computers, to said storage devices and to said connection device, said recording medium being ~~so designed as can~~ able to be read by said management computer, wherein

said storage device has a first control unit for controlling the input and output to and from the volumes based on volume access control information for specifying from among the computers, one or more computers that ~~can~~ are permitted to access the volumes;

said connection device has a second control unit for controlling the input and output of data among said interfaces based on passage access control information defining the input and output of data among the interfaces;

and wherein said management program is ~~recorded in said recording medium and is read by~~ said management computer to execute:

a procedure for receiving ~~a notices~~ of faults in the volumes and said volume access control information from said storage devices;

a procedure for receiving said passage access control information from said connection device; and

a procedure for notifying the faults in the volumes to said one or more computers that are permitted to access the volumes based on said volume access control information and said passage access control information.

11. (Currently Amended) A ~~The~~ recording medium according to claim 10, wherein ~~a the management program is recorded to further executes:~~

_____ a procedure for notifying ~~a fault~~ faults in the volumes to the one or more computers permitted to access the volumes based on said volume access control information, said passage access control information, and managing person control information, said managing person control information for specifying for said volumes or said computers permitting the management for each of the management IDs for identifying the a managing person or the management computer as being permitted to manage said volumes or said computers, instead of executing said procedure for notifying the fault set forth in claim 10.

12. (Currently Amended) A-~~The~~ recording medium according to claim 10, wherein-a
~~the~~ management program is recorded to further executes:

_____ a procedure for receiving said volume access control information from said
computers ~~different from~~ other than said management computer, instead of, or in
addition to executing the procedure for receiving said volume access control
information set forth in claim 10.

13. (Currently Amended) A-~~The~~ recording medium according to claim 10, wherein-a
~~the~~ management program is recorded to further executes:

_____ a procedure for receiving said passage access control information from said
computers ~~different from~~ other than said management computer, instead of, or in
addition to executing the procedure for receiving said passage access control
information set forth in claim 10.

14. (Currently Amended) A-~~The~~ recording medium according to claim 11, wherein-a
~~the~~ management program is recorded to further executes:

_____ a procedure for receiving said ~~access~~ managing person control information
from said computers ~~different from~~ other than said management computer ~~instead of~~
~~executing the procedure for receiving said managing person control information.~~

15-16. (Canceled)

17. (Currently Amended) A management program, stored on one or more storage mediums that are computer readable, to be executed by a management computer that is connected to computers and to a plurality of storage devices for managing the volumes ~~connected to~~ accessible by said computers through a SAN (storage area network), said management program executing:

a procedure for receiving information related to ~~the faults~~ in the volumes from said storage devices;

a procedure for receiving volume access control information from said plurality of storage devices for specifying, from among said computers, one or more computers that ~~can~~ are permitted to access said volumes; and

a procedure for notifying the faults in the volumes to said one or more computers that are permitted to access the volumes based on said volume access control information.

18. (Currently Amended) A management program, stored on one or more storage mediums that are computer readable, to be executed by computers, by storage devices for managing the volumes ~~connected to~~ accessible by said computers through a SAN (storage area network), by a connection device having a plurality of interfaces connected to said computers and to said storage devices, and by a management computer connected to said computers, to said storage devices and to said connection device: wherein

said storage device has a first control unit for controlling the input and output to and from the volumes based on volume access control information for specifying, from among the computers, one or more computers that ~~can~~ are permitted to access the volumes;

said connection device has a second control unit for controlling the input and output of data among said interfaces based on passage access control information defining the input and output of data among the interfaces;

and wherein said management program is read by said management computer to execute:

a procedure for receiving the ~~notices~~ of faults in the volumes and said volume access control information from said storage devices;

a procedure for receiving said passage access control information from said connection device; and

a procedure for notifying the faults in the volumes to said one or more computers that are permitted to access the volumes based on said volume access control information and said passage access control information.

19-20. (Canceled)